

What is claimed is:

1. A storage-type receiving device comprising:
 - a receiving part for receiving a content being transmitted;
 - 5 a storage part for storing a content;
 - a control part; and
 - a restoring part for restoring the content received with the receiving part and/or the content stored in the storage part in accordance with control of the control part;
 - 10 wherein the control part at least controls the restoring part, and the control part comprises a storage control portion for controlling the restoring part so that the restoring part previously reads out part of each content in a plurality of contents alone as a partial content and outputs the partial content to the storage part, and a playback control portion
 - 15 which reads out the partial content stored in the storage part and playback and outputs the partial content.
2. A storage control device, performs control for storing a content received with a receiving part into a storage part, for reading out the content stored in the storage part, for playback the content stored in the storage part, and for outputting the content, the device comprising:
 - 20 a control part including a storage control portion for controlling the restoring part so that the restoring part reads out a part of each content in a plurality of contents alone as a partial contents and outputs the partial content to the storage part, and a playback control portion which
 - 25 reads out the partial content stored in the storage part at request and playback and outputs the partial content.
3. A program for controlling a receiving device, which receives a content being transmitted and stores the content, and restores and outputs the stored content, the program further realizes the function of
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a control part including a storage control portion for controlling so that the restoring part reads out part of each content in a plurality of contents alone as a partial content and outputs the partial content, and a playback control portion which reads out the partial content and
5 playback and outputs the partial content.

4. A computer-readable storage medium for storing the program of claim 3.

10 5. The receiving device according to claim 1, wherein the playback control portion selects and playbacks a desired partial content out of a plurality of partial contents being stored in accordance with a command for playback the partial content from a user.

15 6. The receiving device according to claim 5, wherein the control part conducts one of recording information for specifying the partial content selected by the playback command provided by the user and outputting such information to outside thereof.

20 7. The receiving device according to claim 1, wherein the playback control portion selects and playbacks a desired partial content out of a plurality of partial contents being stored while the control part performs control in response to another command differ from the playback command.

25 8. The receiving device according to claim 7, wherein the command differ from the playback command is a command for displaying a program table created in accordance with a category search,

and wherein the playback control portion selects and searches a
30 partial content belonging to the category to be searched as a desired partial content under the different command.

9. The device according to claim 1 through claim 8, wherein the playback control portion controls so that a plurality of partial contents stored in the storage part are displayed one after another.

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10. The receiving device according to claim 1, wherein the control part controls the restoring part so that the restoring part previously reads out part of each content in a plurality of contents alone as a partial content and outputs the partial content to the storage part in parallel to a process for restoring a signal from the receiving part into a content with the restoring part and output it to the storing part.

11. The device according to claim 1, wherein the storage control portion controls so that only a partial content in a content, which complies with a condition for storing the partial content specified by a user is output to the storage part.

12. The device according to claim 11, wherein the storage control portion conducts one of recording a condition for storing the partial content provided by the user and outputting the condition to outside thereof.

13. The device according to claim 12, wherein the condition for storing the content is a specific category of content.

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14. The device according to claim 13, wherein the storage control portion judges whether or not each content is a pay-per-view content, and wherein the storage control portion controls the restoring part so that the restoring part reads out a preview of the content as a partial content and outputs the preview to the storage part when the content is judged as a pay-per-view content.

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15. The device according to claim 14, wherein the control part performs the following steps when a command for subscribing a specific pay-per-view content from a user is received;

- 5 detecting at when the subscription command is received whether or not a lapsed time from the beginning of the pay-per-view content which is received and output with the receiving part is longer than a time period for playback of preview of the pay-per-view content stored in the storage part, and
- 10 storing the pay-per-view content into a temporary storage part capable of storing a content having a longer playback period than the lapsed time and playback, and playback the pay-per-view content stored in the temporary storage part while playback the preview stored in the storage part when the time period for playback is longer than the elapsed
- 15 time.

16. The device according to claim 1, wherein the control part performs the following steps when a command for subscribing a specific pay-per-view content from a user who views preview of the pay-per-view content is received;

- 20 detecting at when the subscription command is received whether or not the pay-per-view content is currently transmitted in accordance with information on programs received,
- 25 storing the subscription command of the pay-per-view content when no transmission is currently conducted, and
- 30 determining whether or not the pay-per-view content corresponding to the stored subscription command is in an on-air schedule whenever information on programs are updated, and outputting a display which shows that the pay-per-view content will be on-aired when the pay-per-view content is in the schedule.

17. The device according to claim 1, the device further comprising a communication part for communicating with a content provider's device via a communication line,

wherein the control part performs the following steps when a
5 command for subscribing a specific pay-per-view content from a user who views preview of the pay-per-view content is received;

detecting at when the subscription command is received whether or not the pay-per-view content is currently transmitted in accordance with information on programs received, and

10 transmitting by communication part the subscription command of the pay-per-view content to the content provider's device when no transmission is currently conducted.

18. The device according to claim 1, wherein the control part
15 outputs an indication by which a content of its partial contents being stored in the storage part can be distinguished from other contents during restoration of information on programs which is received.

19. The device according to claim 1, wherein the storage control
20 portion deletes a partial content stored in the storage part in order of longer duration of storing to store a new partial content when the new partial content can not be stored in the storage part.

20. The device according to claim 1, wherein the storage control
25 portion finds a partial content of a content which is not currently on-air in accordance with information on programs received, and deletes the partial content to store a new partial content when the new partial content can not be stored in the storage part.

30 21. The device according to claim 1, wherein the storage control portion deletes a partial content which has been playback to store a new

partial content when the new partial content can not be stored in the storage part.

22. The device according to claim 1, wherein the storage control
5 portion deletes a partial content corresponding to a content which has been playback according to a command from a user to store a new partial content when the new partial content can not be stored in the storage part.

10 23. The device according to claim 1, wherein the control part judges whether or not a content corresponding to a partial content can currently be received while the partial content stored is playback, and stores the content in a temporary basis when the content can be received.

15 24. The device according to claim 23, wherein the control part compensates a missing part of a content currently received with the content temporary stored when a subscription command for the content corresponding to the partial content is received while the partial content stored is playback.

20 25. The device according to claim 24, wherein the control part compensates the missing part of the content currently received further using the stored partial content.

25 26. The device according to claim 24, further comprising a buffer in which one of the content stored in a temporary basis and the stored partial content, and, both of the temporary stored content and the stored partial content, are stored temporary,

30 wherein a missing part of the content is compensated and the whole content is playback by additionally storing a content received in the buffer, after the description stored temporary in the buffer is playback

and the description thus playback is deleted.

27. The device according to claim 1, wherein the partial content is preview of a pay-per-view content.

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28. The device according to claim 27, wherein the storage control portion of the control part selectively stores preview of a pre-viewable pay-per-view content out of a content transmitted.

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29. The device according to claim 28, wherein the storage control portion judges whether or not the content is a pre-viewable pay-per-view content in accordance both of description of received ECM and a fact that a valid key is send back as a result of transmitting the ECM to a key reproduction part.

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30. The device according to claim 28, wherein the storage control portion creates a list in which pay-per-view contents that are pre-viewable are listed, and stores the preview of the pre-viewable pay-per-view contents in accordance with the list.

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31. The device according to claim 1, wherein the storage control portion judges whether or not a content to which a command for storing a content being output, is stored without any trouble in accordance with capacity of the content to be stored and the remaining capacity of the storage part when the command for storing content from a user is received, and outputs a display which shows that the storage accompanies a trouble when it is judged that a trouble occurs for the storage of the content.

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32. The device according to claim 31, wherein the storage control portion previously records the capacity of each content during storage of

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the content, and acquires the capacity of each content in accordance with description of the record.

33. The device according to claim 32, wherein the storage control
5 portion outputs another content capable of being stored as a candidate for storage in accordance with capacity of each of the content when it is judged that storage for the content to be stored accompanies a trouble.

34. The device according to claim 31, wherein the storage control
10 portion further judges whether or not the content can be stored with a higher data compression rate when it is judged that storage for the content to be stored accompanies a trouble, and outputs a compression rate when an appropriate compression rate for storing the content is found.,

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35. The device according to claim 31, wherein the storage control
portion further judges the content can be stored by carrying out storage in a summarized form when it is judged that storage for the content to be stored accompanies a trouble, and outputs a display which shows that
20 the storage will be carried out successfully when it is judged that no trouble occurs under the summarized form.

36. A receiving device capable of viewing a part of a content as a partial content, the device comprising:

25 a control part conducts one of recording history of viewing the partial contents and of viewing the content, and outputting the history to outside thereof.

37. A receiving device which receives and stores a content being
30 transmitted, and restores the stored content and outputs the restored content, the device comprising:

a control part which controls so that one of recording a condition for storing the partial content specified by a user and outputting such a condition to outside thereof is conducted while selectively storing a partial content having a condition comply with a condition provided by a user.

38. The device according to claim 37, wherein the control part further controls so that history of command for viewing the stored partial content provided by the user is one of recorded and output to outside thereof.

39. The device according to claim 37, wherein the control part further controls so that either a command for storing the stored content or the history of command for viewing the stored partial content provided by the user is one of recorded and output to outside thereof.

40. The device according to claim 36, wherein the control part transmits to a transmit device either the history or the condition both once stored.

41. A method of displaying an electronic program guide on a receiving device, the method comprising a step of indicating a display by which a program is pre-viewable to each of pay programs.

42. The method according to claim 41, further comprising a step of indicating a capacity required to store the program for at least each of the pay programs.

43. A receiving method comprising the steps of:
previously storing preview of a content transmitted by a transmission device into a receiving device, and

reproducing the stored preview whenever a playback of preview is required.

44. A method for managing content broadcasting, the method
5 comprising the steps of:

at a receiving device;

previously storing transmitted by a transmission device into
preview of a content,

determining whether or not a pay-per-view content is currently on-
10 aired in accordance with information on programs at when a user
provides a command for subscription according to the stored preview,
and

transmitting to the transmission device the subscription command
of the pay-per-view content when the content is not on-aired,

15 at the transmission device;

receiving commands for subscription from a plurality of receiving
devices, and

determining whether or not rerun of the pre-per-view content is
carried out according to the number of the subscription commands.

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